FY18 Plans for DAPPeR and FCX

Ajinkya Kulkarni

2017 GHRC User Working Group Meeting
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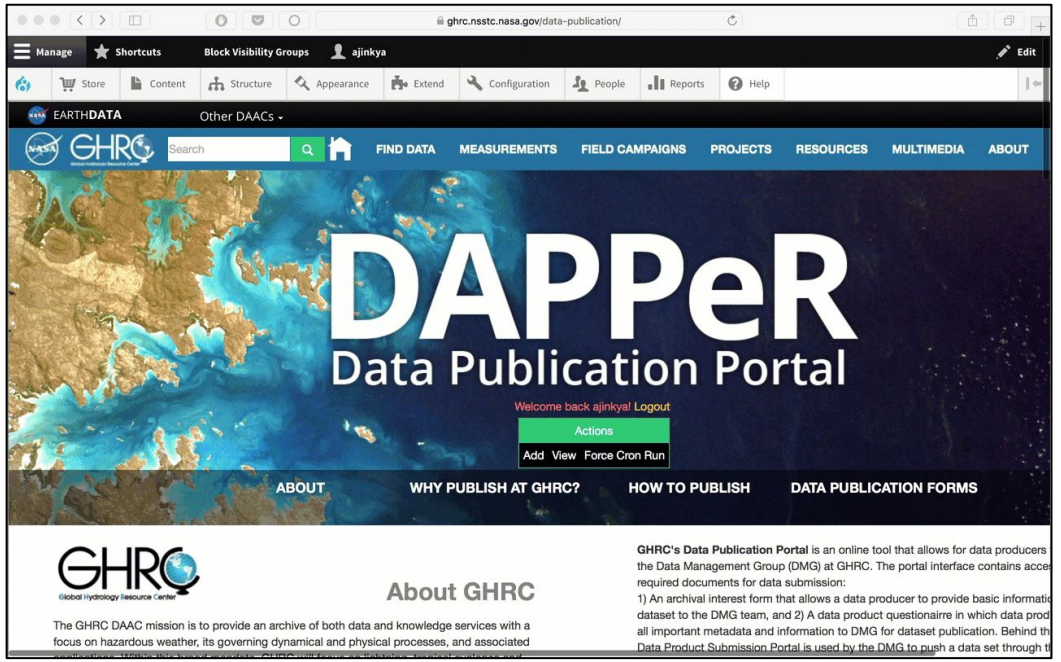
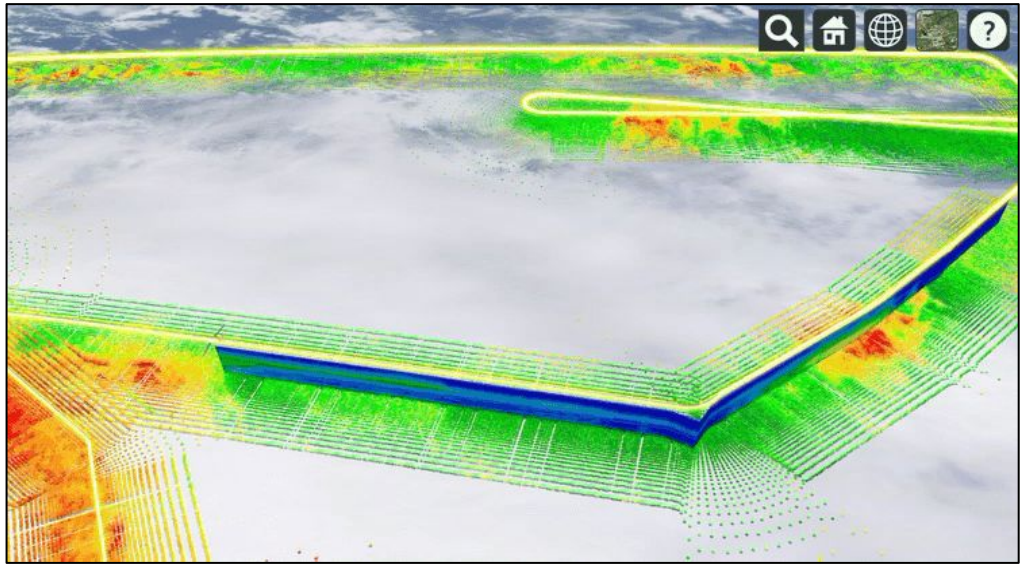
Outline

FY18 plans for:

- Data Publication Portal (DAPPeR) improvements
- Field Campaign Explorer (FCX) improvements



https://ghrc.nsstc.nasa.gov/data-publication/

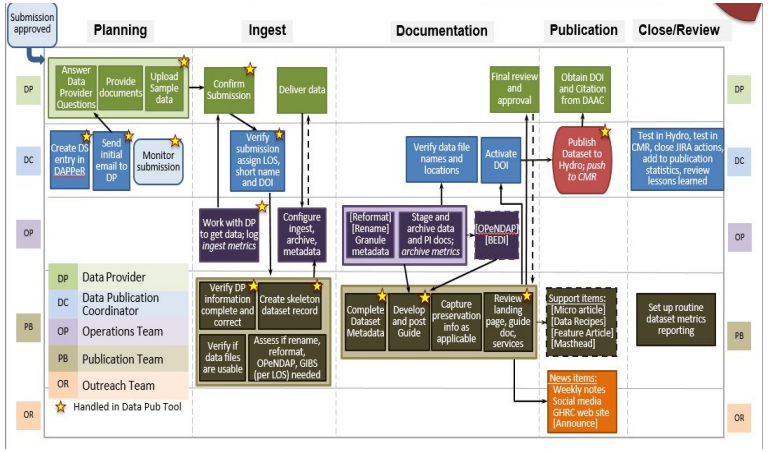


https://ghrctest.nsstc.nasa.gov/fc-explorer/

DAPPeR FY18 Plans

Current Semi-Automated Data Publication Workflow (as of FY17)

Based on ORNL DAAC's Semi-Automated Ingest System (SAuS)



Data Files

Script

Script

Script

Script

Development Team

Granule Level Metadata Files

Crontab

Scripts

Data Management Team

DAPPeR

Developed in FY17

Collection Level Metadata

Postgres Catalog Database

Migrated to Postgres Database in FY17

DAPPeR FY18 Plans

Result of Implementing DAPPeR Based Workflow ⟶ Improved Efficiency

Happy DAAC Manager

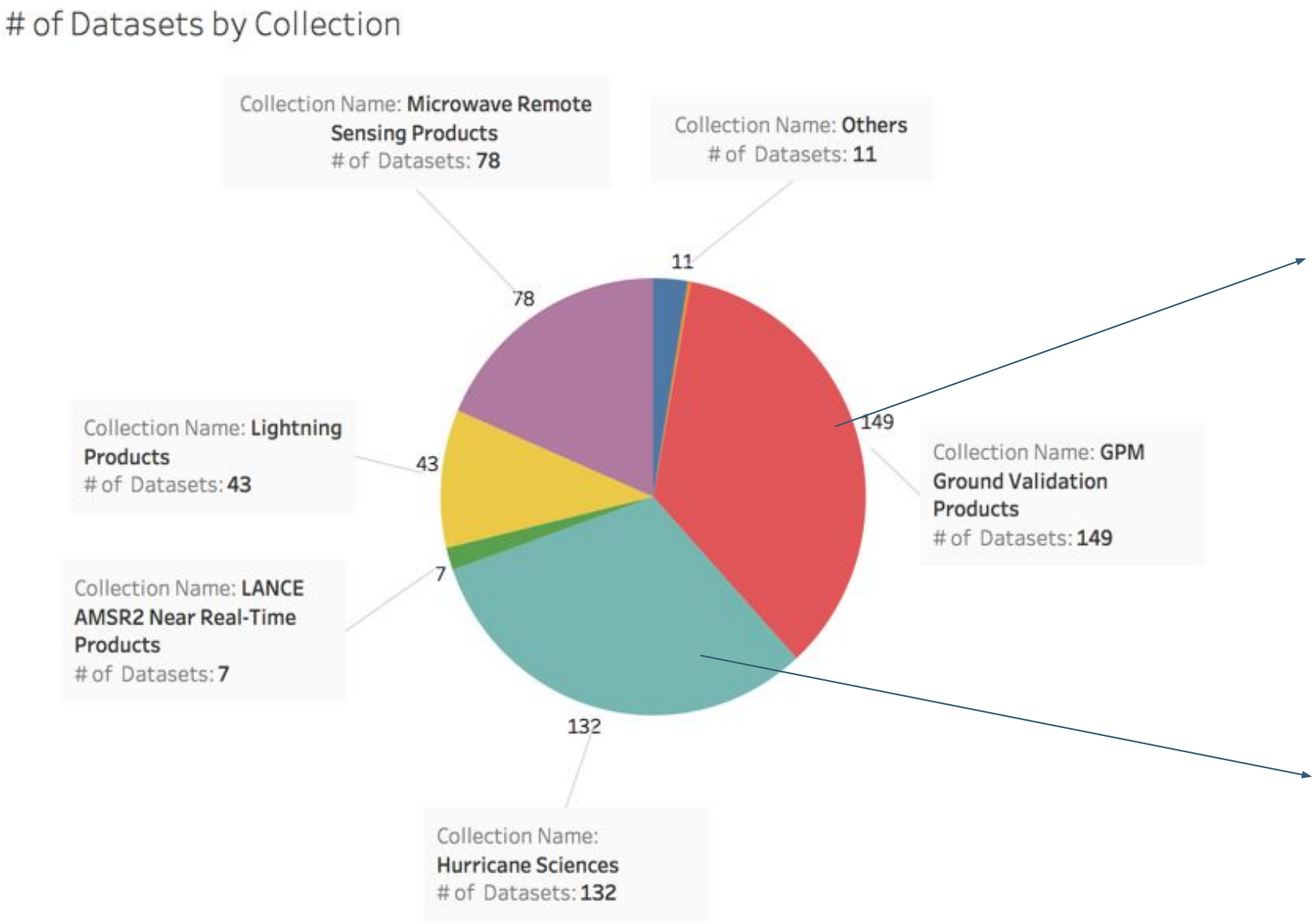
DAPPeR FY18 Plans

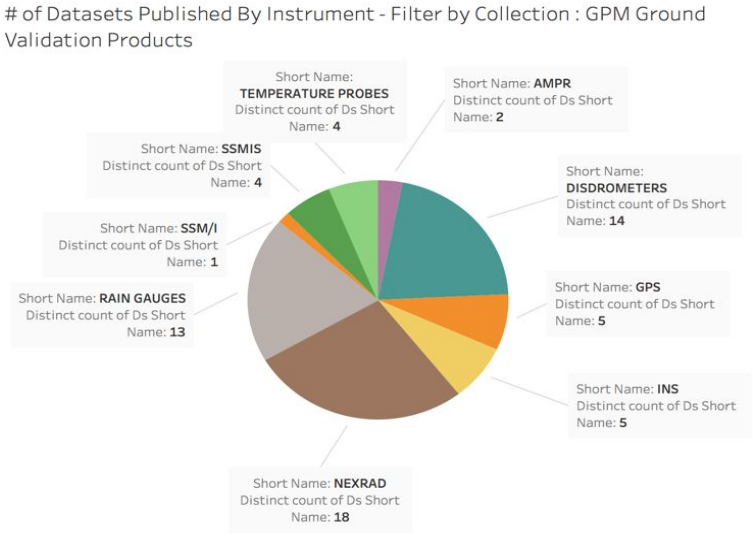
Question - can we do even better?

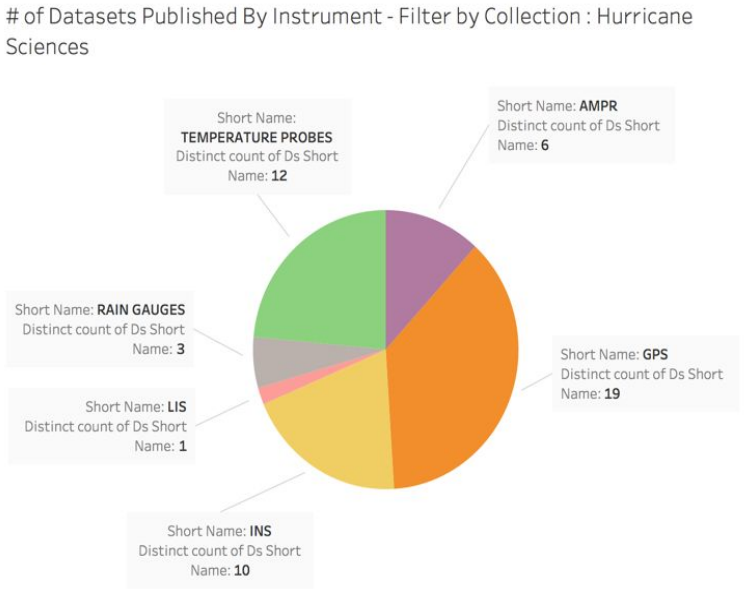
Development Team

DAPPeR FY18 Plans

GHRC Data Holdings by Collections



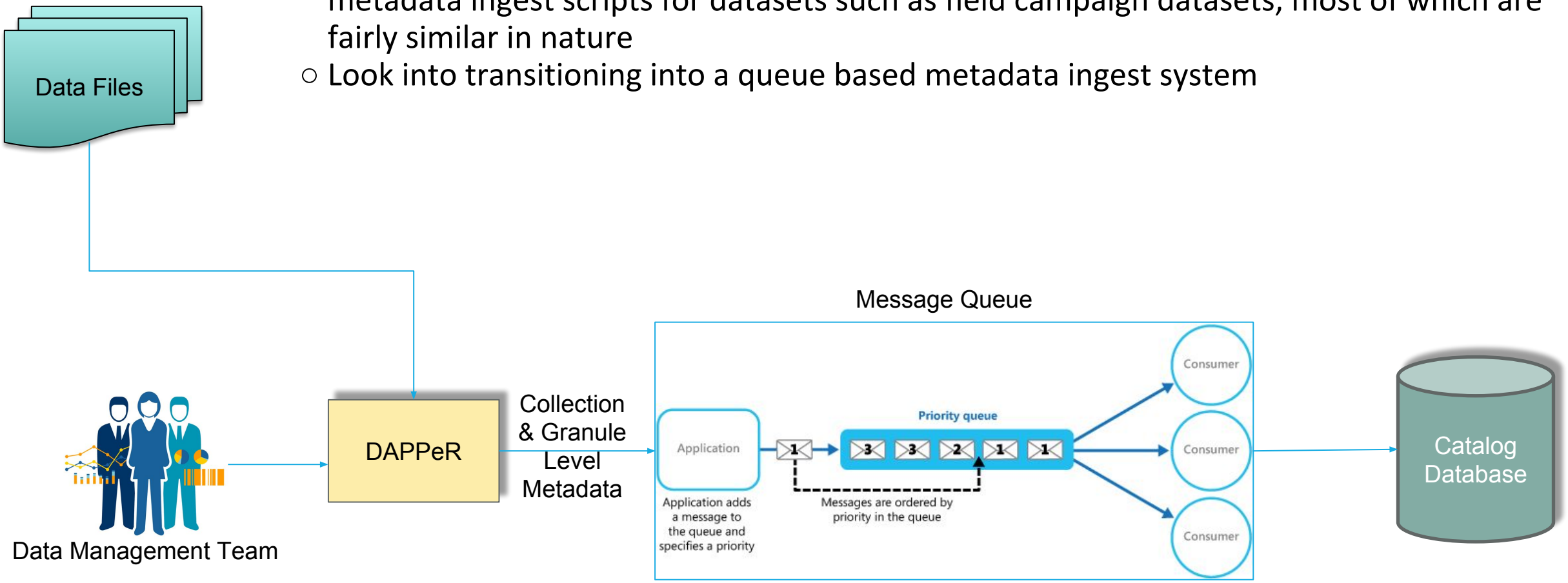




DAPPeR FY18 Plans

Semi-Automated to Fully-Automated Data Publication System

- Work towards fully automating data publication workflow process
  - Look into developing a DAPPeR module to extract, map and auto generate granule level metadata ingest scripts for datasets such as field campaign datasets, most of which are fairly similar in nature
  - Look into transitioning into a queue based metadata ingest system



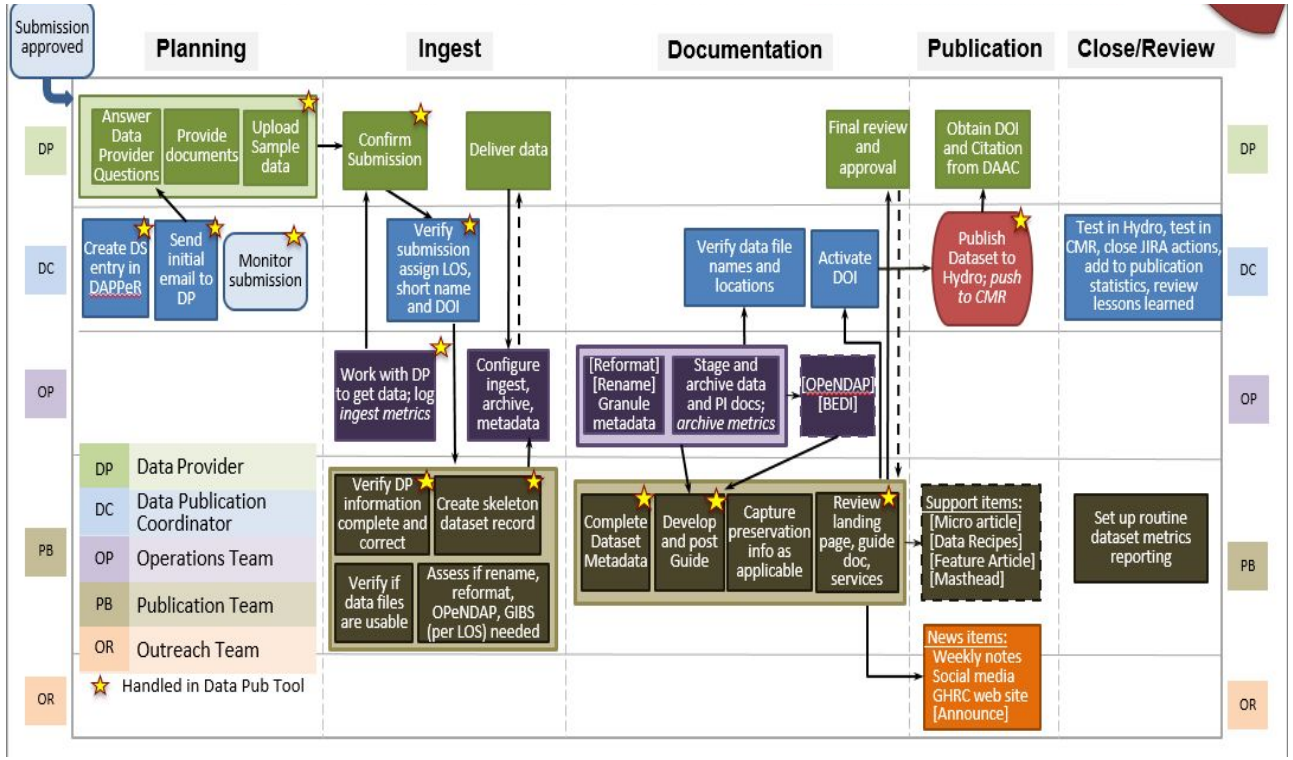
DAPPeR FY18 Plans

Other Features

- Automated email notifications
  - Form submissions
  - State changes
  - Error messages

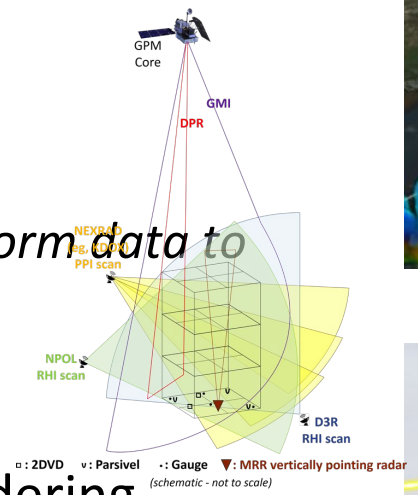
- A dataset specific email address (e.g ghrc-pubs+dataset1@uah.edu) to track/organize conversions in a centralized location

- Detailed metrics collection for automated reporting and identifying the bottleneck or holdup



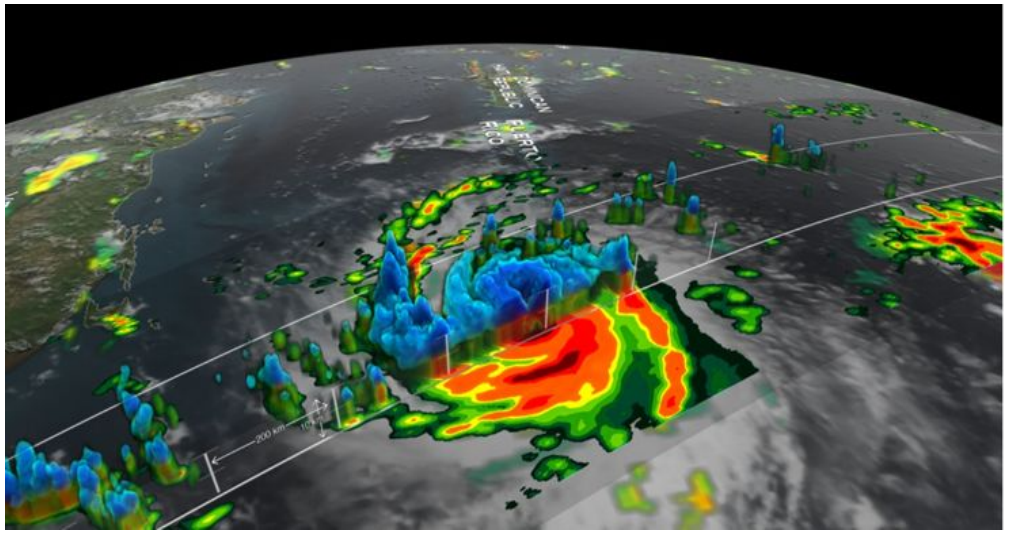
FCX FY18 Plans

- Aligning the work with VISAGE project
  VISAGE: Visualization for Integrated Satellite, Airborne and Ground-based data Exploration
  - AIST 2016 Award - 2 year project, starts from October 2017
  - PI : Helen Conover, UAH
  - Co-I : Manil Maskey, MSFC
  - Collaborators: Walt Petersen and Dave Wolff
  - Targeted Data Products: SIMBA
    SIMBA: System for Integrating Multi-platform data to Build the Atmospheric column

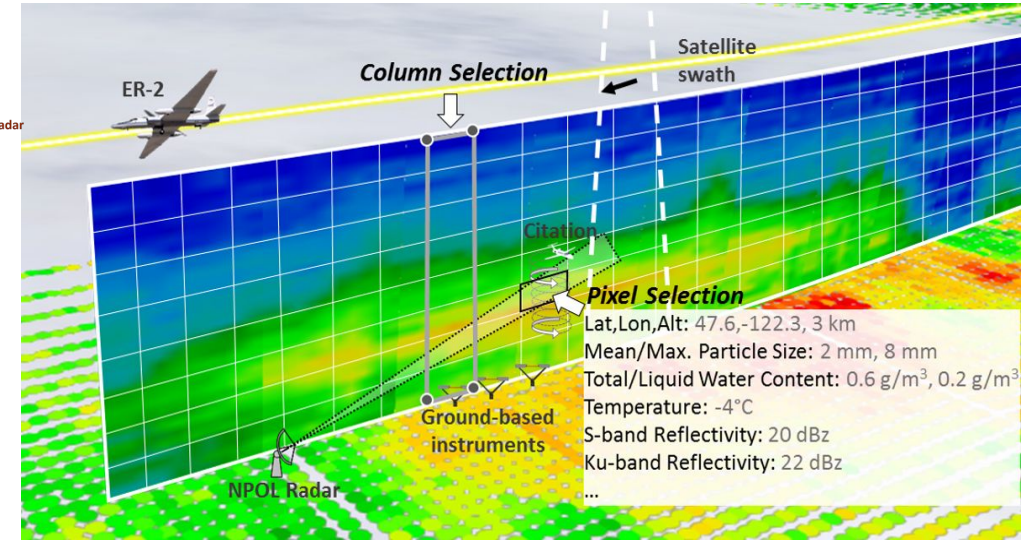


- Explore ideas-
  - Interactive web based 3D volume rendering
  - Pixel and column selection
  - Analytics functions
  - 3D fly-through pre-rendered videos

- Participate in ESDS Vertical Profile Visualization WG



3d volume rendering



Pixel and column selection

Thank you!

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